

TIGER TEAMS

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TASSISTANCE

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OFFICE of ENERGY EFFICIENCY and RENEWABLE ENERGY

Transit Users Group Supports Transit Agencies with Natural Gas Buses

Across the nation transit agency operators are implementing low-emission natural gas buses and fueling infrastructure to address air quality and energy security issues. And with new technologies come questions and challenges. Whether they are incorporating new buses into their fleets or maintaining current buses, transit managers need their questions answered to successfully integrate vehicles into their operations.

Ken Proc, NREL/PIX 03024

TUG brings U.S. transit fleet managers together to discuss best practices for successful natural gas transit operations.

The Natural Gas Transit Users Group (TUG) is here to help. Composed of representatives from transit agencies, industry associations, and government entities, TUG was developed to assist transit agencies that have (or are considering) compressed or liquefied natural gas buses and other transit vehicles. Its focus: to promote natural gas vehicle technology in transit fleets.

Formed in the mid-1990s by the Gas Technology Institute (GTI), TUG began as a forum to discuss issues and solve early technical problems associated with natural gas use in buses and other fleet vehicles. TUG

was reinvigorated in 2000 by the partnering of the U.S. Department of Energy (DOE), the Natural Gas Vehicle Coalition (NGVC), and GTI, which combined efforts to support this group of alternative fuel stakeholders. The most recent TUG meetings were conducted in January and November 2001.

According to the American Public Transit Association, as of January 1, 2002, almost 5,000 natural gas buses (almost 10% of the U.S. transit fleet) are in revenue service. This number is expected to grow as more transit agencies switch to natural gas in response to energy security and air quality concerns. TUG's ultimate goal is to support these agencies during their transition.

Getting Together

TUG typically meets twice a year. Meetings are held at varying locations where a transit host or industry partner is using natural gas vehicle technologies that are of interest to the group. For example, the 2001 meetings were held at the Metropolitan Atlanta Rapid Transit Authority (MARTA) in Atlanta and SunLine Transit Agency in Thousand Palms, California. MARTA recently doubled the size of its compressed natural gas bus fleet and refueling operations. SunLine has a comprehensive alternative fuels program that incorporates natural gas, hydrogen, hythane, and fuel cell technologies in its operations.

The purpose of the two-day meetings is to facilitate constructive communication between transit agencies, share information on natural gas technology, highlight success stories, identify common problems, and discuss solutions. Topics covered during TUG's 2001 meetings include:

 Potential savings and benefits from operating a natural gas transit fleet

- Safety issues (gas detection systems, emergency ventilation systems, safety relief devices)
- Fail-safe design planning and procedures
- Lessons learned from recent industry incidents
- Equipment maintenance
- Training programs for transit operators and mechanics
- Overcoming false rumors and one-sided stories
- Government grants and funding mechanisms
- Testing and evaluating vehicles and new technologies

Meeting agendas also include educational tours of natural gas facilities that use new technologies, Q&A sessions (led by industry representatives), industry incident reports, new equipment demonstrations, open discussions, and breakout sessions.

For Members Only

Participation in TUG is limited to transit agency maintenance and operations staff, related government agencies, and selected technology experts who provide specialized natural gas vehicle technical assistance. By design, vendors and suppliers to the transit industry are admitted by special invitation only, during times when their technology or service is addressed by the group.

There are no fees to attend the twice-yearly sessions (members pay their own travel expenses), and meeting proceedings are sent to members free of charge regardless of whether they attend the sessions. To join, contact Hank Seiff, NGVC technology director, at hseiff@ngvc.org, 202-824-7364. He will register you and make sure you receive notice of upcoming meetings.

Also free to members is the TUG Group Discussion Forum, located at www.ngvc.org/ngv/ngvc.nsf/bytitle/discussiongroups.htm. Sponsored by NGVC, this chat room offers members the opportunity to communicate regularly. There, users can ask questions, offer advice, or promote related events. If you would like to participate in this forum, contact Seiff at NGVC for an ID number and password.

Continued Support

TUG members can enlist the help of DOE's Clean Cities Program Tiger Teams to solve specific problems. Hand picked by DOE and the National Renewable Energy Laboratory, this group of experts provides assistance in problems regarding:

 Vehicle operations: vehicle performance or drivability, safety, maintenance, driver acceptance, specialized training needs, and implementation of alternative fuel vehicles at specific sites.

 Infrastructure operations: fueling station design, interaction with alternative fuel providers and fire safety code officials, fueling station performance and maintenance requirements, and user/operator training.

Before asking for specialized help, requesting agencies typically have to demonstrate that all appropriate efforts have been made at the local or regional level to solve the problems. DOE is especially interested in problems that suggest patterns of equipment failures or chronic service issues, as they may indicate industry-wide problems. Tiger Teams can provide prompt technical assistance to address such needs. For more information on Tiger Teams, visit <code>www.ccities.doe.gov/tiger.html</code>. (Agencies requesting Tiger Team assistance will have to complete the same process identified for Clean Cities coordinators.)

For More Information

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